


# ROTUNDA

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How Bats Came to Be  
A Figurine from Lamanai  
"Very Choice Italian"  
Oystercatcher Mecca  
The Beginning of Couture





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# ROTUNDA

the magazine of The Royal Ontario Museum

Volume 14, Number 4, Winter 1981/82

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**Cover photo:** Magellanic penguins on the shore at Punta Tombo. (Photo Allan J. Baker, ROM)

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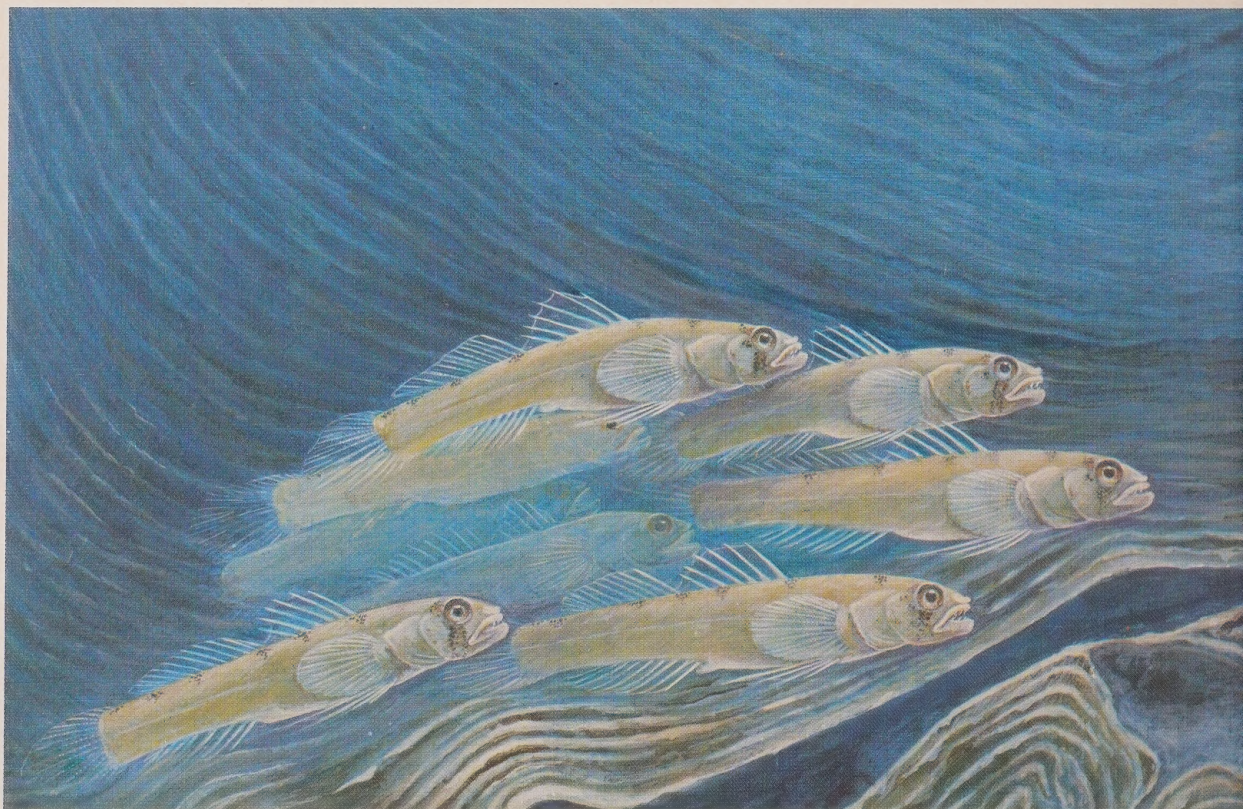
# Focus on . . .

## *The Discovery of the World's Shortest Vertebrate*

Richard Winterbottom and Alan R. Emery

**I**N 1978 WE HEARD that a British scientific/military expedition was planning to visit the remote and uninhabited Chagos Archipelago in the central Indian Ocean. Even though we had only six months' notice, we managed to insinuate ourselves into the expedition, along with our research plan to assess the fish fauna and fisheries potential of these coral islets. After three and a half months on the different atolls in the archipelago, we returned to Canada with about 1500 kilograms of fish (approximately 50 000 specimens). These we sorted into their respective families. Then, throwing caution to the winds, we began the task of identifying the various species with the most difficult family of them all.

The family Gobiidae ("gobies") contains more species than any other family of tropical marine shore fishes. More than 2000 species have already been described from the Indo-Pacific region alone and there are many species yet unnamed. We found that we could separate the Chagos gobies into 97 "piles",





each consisting of one species. Fifteen to twenty of these piles have no scientific names, that is, they are new species either never seen before or awaiting description.

Among the unnamed species, two stood out by virtue of two characteristics discernible at a glance under the microscope—a body that lacked scales and a pelvic fin whose rays were simple; that is to say, they did not branch repeatedly as in all other Indo-Pacific gobies. Because they were so distinctive and because nothing like them had ever been described before, we wrote a paper describing them as two new species. We chose these species to describe first for another reason: we had collected females of one of the species, as small as 8 mm, that contained fully developed eggs visible through the body wall. The average length of females was 8.8 mm and the largest specimen was a scant 10.2 mm long, about half the width of a dime. The eggs were also tiny—an 8.7 mm long female contained 54 eggs with an average diameter of 0.25 mm.

When we mentioned this in the lab one day, George Coker, our technician, said, “Wow—is that the smallest fish?” The thought hadn’t occurred to us. We rushed off and thumbed through dusty volumes until we came to Alfred Herre’s 1927 description of *Pandaka pygmaea*, a goby from the fresh waters of the Philippines. Females with eggs are 10 to 11 mm in length and the fish is widely acclaimed (for example, in *The Guinness Book of World Records*) as the world’s shortest vertebrate. A difference of 2 mm may not seem much, but it represents a 20 per cent reduction in length. By way of analogy, a blue whale is about 0.03 km long and a whale shark about 0.02 km—a difference that doesn’t seem very significant when expressed in this way but which in fact represents a difference of 33 per cent—10 metres, or more than 30 feet.

Further digging in the literature revealed that in 1980 two scientists at the Smithsonian Institution had tentatively claimed the title of shortest vertebrate for a goby, *Eviota infulata*, which may mature at 8.9 mm in length but is usually larger. Our goby was still 10 per cent shorter.

Although we had tried to photograph all species we collected while they still had life colours, we were only partially successful in this case. We did photograph the larger of our two new species, but the specimens of the smaller species were so tiny that we had mistaken them for babies, or fry, of some other goby species.

One of the more enjoyable tasks in describing new animals is trying to dream up new names for them. We decided to call our new genus *Trimmatom*, a

compound name derived from *Trimma*, the name of a closely related genus of gobies, and *atom*, a very small particle. The species names we chose were *nanus*, a dwarf, for the smallest vertebrate, and *offucius* for the species depicted in Peter Buer-schaper’s painting (illustrated). *Offucius* is Latin for a paint or wash, usually red in colour, that is used upon the face; we thought the name suitably evoked the orange-red bar beneath the eyes that characterizes this new species.

We collected 93 specimens of *Trimmatom nanus* and 170 specimens of *Trimmatom offucius*, mainly from vertical underwater coral cliffs at depths of 20 to 40 m. The cliffs drop away to the ocean bottom some 2000 m below. *Trimmatom nanus* appears to live either solitarily or in very small groups, since the maximum number collected at any site was 9 and the average was 4.4. *Trimmatom offucius*, on the other hand, seems to be a schooling species; the maximum number for one collection was 54 and the average number was 11 specimens. Analysis of what they had eaten showed that these tiny fishes prey on minute planktonic crustaceans (animals that drift in the ocean currents and are similar to shrimps).

Perhaps the most meaningful way to express an idea of the size of these fishes is by comparison. For example, it would take 62 692 individuals of *Trimmatom nanus* lined up head to tail to top the 551.7 m CN Tower. Three-quarters of a million would be needed to fill a five-gallon pail and 3674 to make a Quarterpound Gobyburger, but the entire collection of *Trimmatom nanus* in the world’s institutions would supply only one-fortieth of that Gobyburger. It would take three and a half million *Trimmatom* eggs to fill one hen’s egg.

Scientifically, the discovery of *Trimmatom nanus* is interesting, but not particularly important—something has to be the shortest vertebrate. However, the discovery does show us how small vertebrates can become and yet survive. Even though small size means that there will be a greater number of potential predators, it must have some advantage—presumably access to an underexploited food resource too small for most animals of the coral reefs to utilize effectively. Nonetheless, it is fun to have been lucky enough to have discovered the world’s smallest something.

Alan R. Emery is Curator and Richard Winterbottom is Associate Curator in the Department of Ichthyology and Herpetology of the ROM.

*Painting by Peter Buer-schaper.*



# How Bats Came to Be

## *An Ojibway Legend*

Basil H. Johnston

*Each of the four sons of Winona and Epingishimook (West Wind) left special gifts to the Anishinaubeg (Ojibway). From Mudjeekawiss came courage and a heritage; from Papeekawiss, a sense of beauty and ceremonies; from Chibiabos, romance and poetry; and from Nanabush, humour and the art of storytelling.*

*It is through stories that the knowledge and understanding of one generation are passed on to*

EARLY ONE MORNING while he was on his way to his home in the sky, Father Sun got caught in the branches of a tall tree. He tried and tried to free himself, but only managed to entangle himself more firmly. Soon Father Sun could not move at all.

That morning all the animals waited in vain for Father Sun. When he did not appear, they went quietly back to their beds. They thought that they had not slept long enough and it was still night. The bear went back to his cave. The rabbit returned to his nest under a bush at the edge of a field of sweet clover. The chipmunk went into his hole in the roots of an oak tree. Only the owl, the wolf, and the fox were happy, for they could hunt a little longer than usual in the dark.

When Father Sun did not appear the next day, the animals began to suspect that he had got lost on the way home. They searched through most of the forest, but they could not find him.

One little squirrel always looked at the treetops because he liked to jump from branch to branch. He discovered Father Sun stuck in the topmost branches of a tall tree. By this time Father Sun was very pale and weak.

"Little squirrel, little squirrel," he rasped in a low voice, "little squirrel, set me free."

"Certainly, Father Sun," replied the little squirrel, and he ran up the trunk of the tree towards the topmost branches. But Father Sun's heat drove him back to the ground at once.

Again Father Sun called out, "Little squirrel, little squirrel, set me free, set me free."

"Oh, Father Sun, you are too hot," said the little squirrel sadly. "You have already burnt my fine long tail." He had always considered his tail very handsome and was sorry that it was gone.

"Try again," pleaded Father Sun. "I am so tired that my light will soon go out."

The little squirrel ran up the trunk of the tree a second time. He almost reached Father Sun before the fierce heat drove him back.

As the squirrel reached the ground once more, Father Sun groaned, "Little squirrel, little squirrel, please try one more time."

"Father Sun," cried the squirrel, "your heat has burnt off my fine long tail. My fur is black. What is more, I can't see. Your light has made me blind."

"Please, little squirrel, try again," whispered Father Sun. "My light will soon go out."

Once more the little squirrel ran up the trunk, this time as fast as he could go. When he reached the branches at the top of the tree, he gave Father Sun a tremendous push. At that moment Father Sun broke free and sailed up towards his home in the heavens.

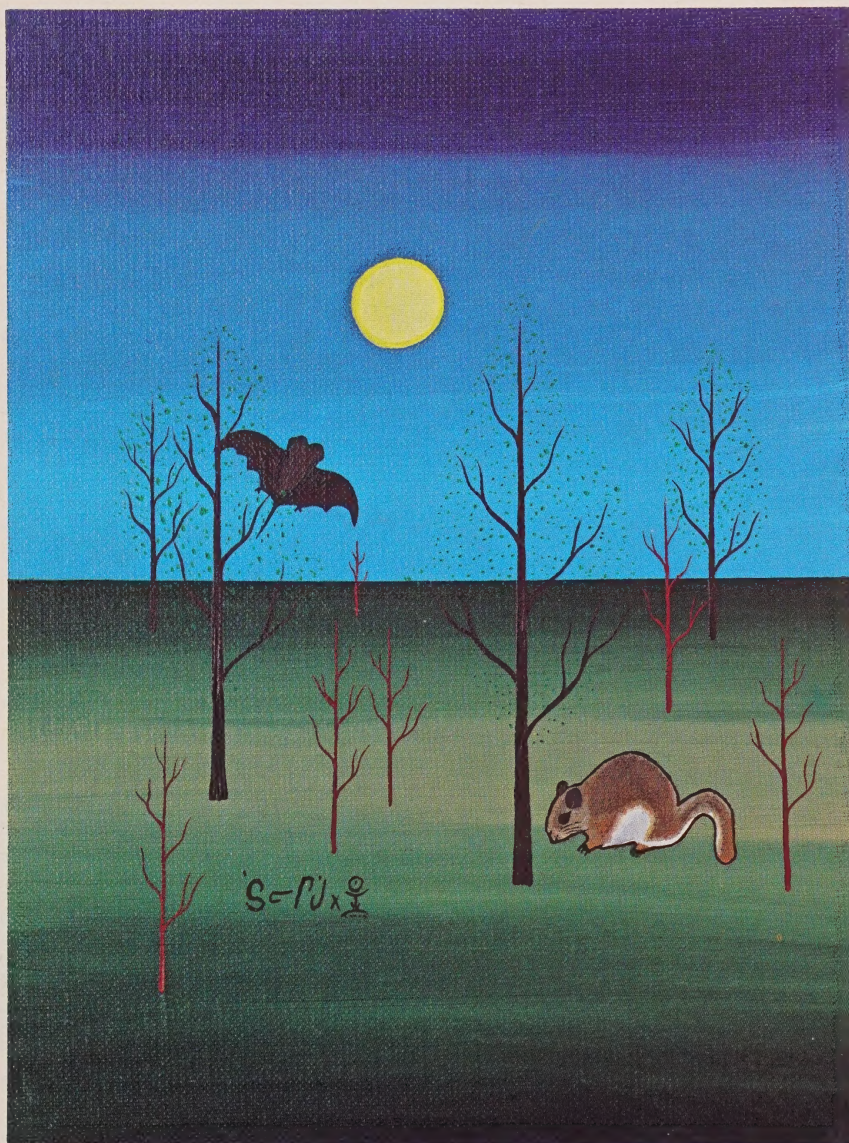
The squirrel held on to the branches with all his might. The intense heat had made his arms grow longer and his skin stretch out. Now it seemed that he was caught at the top of the tree forever. There was no one that could



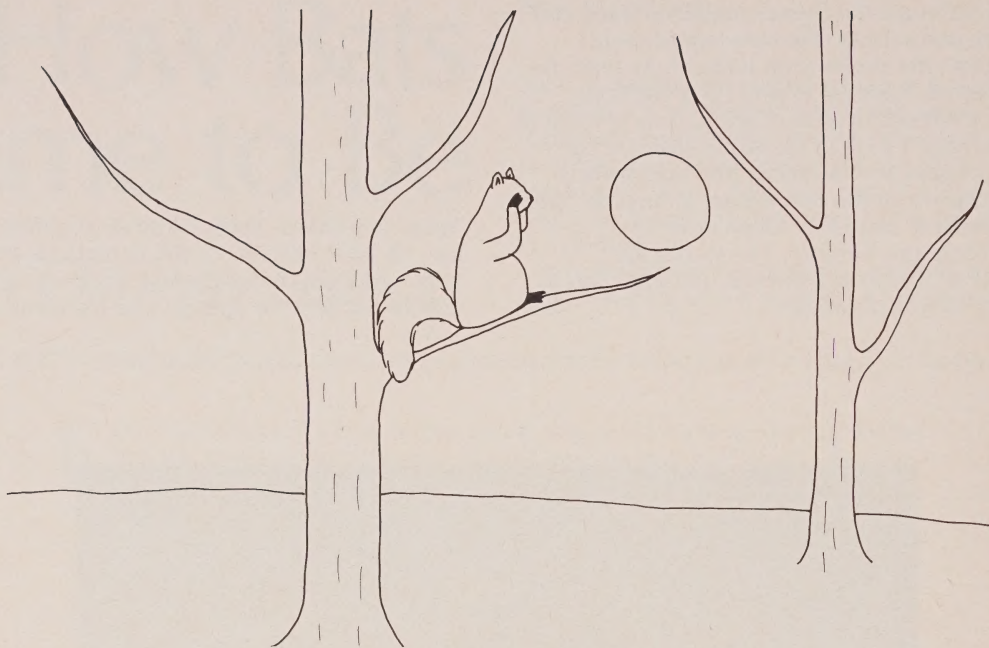
the next. Although the themes are far-ranging and often deep and serious, the storytellers could always relate the stories with humour. In 1981 the ROM published *Tales the Elders Told: Ojibway Legends*, a collection of nine stories; one of them is here excerpted. I wish to thank the elders of the Ojibway peoples for the stories and particularly Wahwahskgone for her permission to include *The First Butterflies*, *How Bats Came to Be*, and *Thunderbirds and Fireflies*. The stories are illustrated with superb paintings and drawings by Cree artist Shirley Cheechoo.

B.H.J.

*Tales the Elders Told: Ojibway Legends* (1981, 64 pp., ill. b&w and colour, \$8.95 cloth) is available by mail order from Publication Services, ROM. Please add 10 per cent for postage and handling.







rescue him. His scorched skin hurt and his eyes were so sore that he could not see at all.

Father Sun paused and looked back. He was distressed to see how much he had harmed the kind squirrel and knew that somehow he must help the little creature.

"Poor little squirrel," he said, "in helping me you have been hurt. Now I shall repay your kindness. What is your dearest wish?"

"I have always wanted to fly," the squirrel answered, "but now it is too late. I am blind and my skin hurts so much that I must surely die."

Father Sun nodded and suddenly the pain left the squirrel. But he still could not see and his skin and arms were still stretched.

"From now on," said Father Sun, "you will be able to fly into the heavens just as you have always

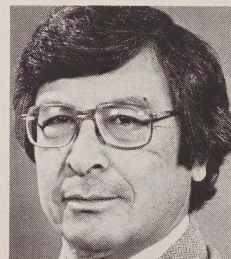
wanted to do. Since my light hurts your eyes, you will fly at night. Although your eyes are blind, your ears are still very sharp. When you call out, the trees and rocks will send back echoes to you. Then you will know that there is something in your way and you will be able to dive and swoop to avoid hurting yourself. I shall see you in the morning and in the evening on my journey back and forth."

The squirrel dropped his arms from the branches and flew away. He had become a little brown bat. Ever afterwards he would hang upside down when he slept in the daytime. Then everyone would remember the day a squirrel saved Father Sun so that the world could have light and warmth.

And that is how a squirrel became a little brown bat.

---

*Basil Johnston, Lecturer in the ROM's Department of Ethnology, is an Ojibway member of the Cape Croker Indian Reserve in Ontario. A teacher and a writer, he specializes in Ojibway history, language, and mythology. His other books include Ojibway Heritage and Moose Meat and Wild Rice, a book of humour and satire.*



*Shirley Cheechoo lives and works in West Bay, Manitoulin Island, Ontario. Her considerable gift for contemporary Native art is evident in the drawings and paintings commissioned especially for Tales the Elders Told.*



Ixchel and God N, a pottery figurine from Jaina, height 10.7 cm. (Drawing by Rita Granda, ROM after I. Groth-Kimball, *Maya Terrakotten*, 1960, fig. 28)



# The Old Man and the Moon

## *A 14th-Century Figurine from Lamanai*

David M. Pendergast

OVER THE YEARS the excavations at Lamanai in northern Belize have turned up a huge store of objects from ancient Maya life, many of them of kinds previously unknown in the area (see "The Church in the Jungle", *Rotunda* 8:2, 1975, pp. 32-40; "A Face from the Past", *Rotunda* 10:1, 1977, pp. 4-11; and "An Ancient Maya Dignitary", *Rotunda* 13:4, 1981, pp. 5-11). In the 1981 season we began work on a great complex of structures just at the back of our camp, and here as elsewhere we encountered quantities of new information on the occupation of Lamanai from the 10th to the 16th century, and even earlier. We had bypassed this area in earlier





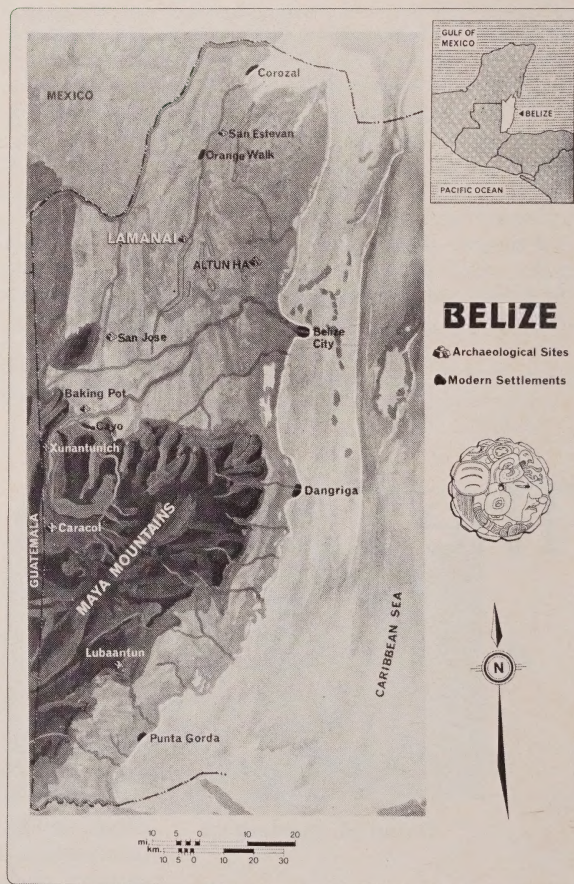
Left: The Ixchel-God N figurine from Lamanai, height 6.1 cm. (Drawing by Louise Christianson)

Right: Ixchel and God N, a Jaina figurine, height 25.6 cm. (Reproduced by permission of The Dumbarton Oaks Research Library and Collections, Washington, D.C.)

seasons because of its singularly unattractive appearance; with nothing save masses of boulders visible on the faces of its many platforms, it seemed a most unlikely prospect for excavation. This year, however, we decided to have a look at a small rise on top of the largest platform, and as a result we are now engaged in what could become a task stretching over the two remaining years of the Lamanai project.

By mid-season we had begun to reveal structures buried beneath the masses of boulders and to clear a large complicated residence at the west side of the main platform (see "Lamanai 1981: A Regular Three-Ring Circus", *ROM Archaeological Newsletter* No. 192). The roof and upper walls of the house were probably constructed of poles and thatch, so that all we have left are the wall bases and the floors of numerous rooms and courtyards. There is also evidence of a staggering number of alterations and additions to the original structure. At its north end the house once boasted a courtyard bordered in part by small platforms that may have supported other residences. In the courtyard and at all other sides of the house lay masses of refuse, the residue of an age that knew nothing of green plastic bags and twice-weekly visits from massive trucks.

The refuse surrounding the house gives us myriad insights into the lives of the building's occupants, though we are often left with almost as many questions as would face an archaeologist attempting to unravel the skeins of our lives by sorting through those plastic bags. Mixed in with the most recent part of the courtyard deposit, which dates from



(Map by David Findlay, ROM)







Right: Pottery whistle figurine from Jaina depicting a dwarf with some God N features, including the headdress, height ca. 9 cm. (Drawing by Rita Granda, ROM after C. Corson, *Maya Anthropomorphic Figurines from Jaina Island, Campeche*, 1976, fig. 16d)

Below: *Ixchel* and God N, as depicted in the *Dresden Codex*. (Drawing by Rita Granda, ROM)



about the end of the 14th century A.D., were tools, jewellery, and other appurtenances of daily living. Among these was a small figurine that is far more interesting than its size and less-than-beautiful appearance would lead one to expect.

The figurine must have been made hastily, though by someone to whom the handling of potting clay was a familiar task. Although crudely executed, the little object depicts two people skilfully enough to make their identification reasonably clear, and to give the piece an ineffable quality that belies its insignificant size and unfinished appearance. The figurine is a representation of a not uncommon Maya theme—a rather ugly old man embracing an attractive young girl. In this case it is more the ugliness of the lefthand figure than any great beauty in his companion that suggests the identification of the pair, though the artist managed to give the girl a face fair enough to make her seem, at least in comparison with her escort, not altogether without charm. The figurine is, in fact, an excellent example of an ancient artist's mastery of minimal representation, a style we think unquestionably modern.

At first glance the little figurine seems to be a bit of

soft pornography, and hence as modern in image as in execution. In fact, however, the scene has symbolic significance and was not meant to depict an event in real life. Interpretation of its meaning depends largely on the identification of the two figures—the kind of question often fraught with difficulty but here, fortunately, somewhat less perplexing than usual. Other representations of the scene exist which, because of their high quality, give us a greater number of identifying clues; they include figurines from the island of Jaina, off the west coast of the Yucatán Peninsula, that depict facial features and elements of costume in striking detail. The scene also appears in the *Dresden Codex*, one of the lamentably few pre-Columbian Maya books that have survived the assaults of time and Christianity.

The couple does not, as far as I am aware, appear on pottery vessels, though at least the male—and probably also the female—player in the drama is depicted alone fairly frequently on pots and elsewhere in the corpus of Maya art. The evidence from the various depictions is enough to identify both participants in the scene and to suggest that the obvious assumption about what they are up to is far from the



figurine's true symbolic meaning.

The age of the male figure, along with features of his costume in the more elaborate portrayals, marks him as God N, a deity who often appears emerging from a marine shell but who sometimes wears a turtle shell on his back instead. Although the marine shell is generally identified as a conch, it seems, even allowing for considerable artistic licence, that some other species is represented unless the shell is that of a juvenile, which is unlikely in view of the advanced age of the deity. Because we do not know his ancient name, God N has undergone various identity crises over the years; in scholarly treatises his role has shifted from the seemingly obvious sea deity to an impersonation of Mam the Earth God to one of the four *Bacabs*, beings who held up the sky over the heads of ancient Maya believers. This last identification is the one now generally accepted.

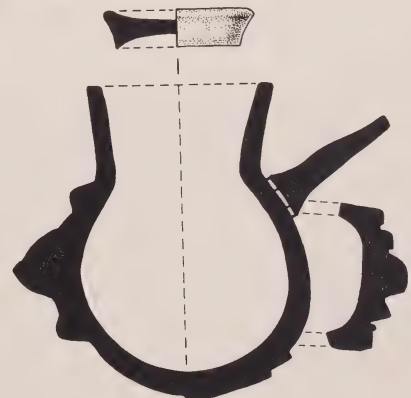
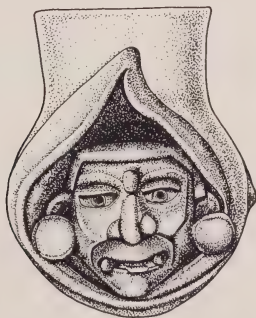
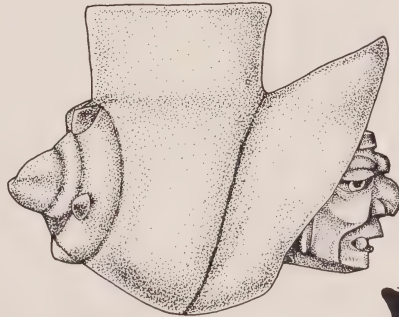
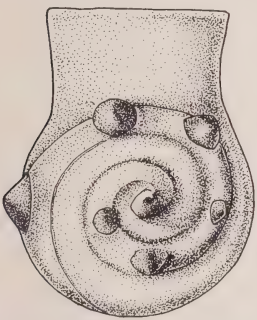
While he often bears a tun (Maya year) glyph in his headdress as an identifying symbol, God N also appears wearing a deer-head headdress both in Jaina figurines and on a gold disc from the Cenote of Sacrifice at Chichen Itzá in northern Yucatán. Sometimes, as in the Lamanai depiction, he is bareheaded and without a shell or other mark of identity; presumably his age and his unpleasant appearance were sufficient to tell a knowledgeable ancient Maya who he was and what he represented.

The young lady is also identifiable, not so much by her costume or other symbols as by her youth. There is only one young female deity clearly identifiable in the Maya pantheon; she is *Ixchel*, the Moon Goddess. Her associations are also known: in the curious combination of characteristics that seems to

have marked most or all Maya deities, *Ixchel* was the moon and, at the same time, goddess of procreation, of the earth, and of water. This last association presumably linked the goddess to the marine shell symbol, and by extension both she and the shell came to be associated with birth. Thus the goddess's realms and symbols overlap those of God N, and their joint appearance begins to look more logical than the difference in their ages makes it seem.

God N, as an aged *Bacab*, was linked with the sky he helped support and so shared this sphere of the world with the Moon Goddess. At the same time the shell, symbol both of water and of the nether regions of the earth, bound both deities to these other two principal realms of the environment; thus the pair may have been a dual embodiment of the complete universe. Because God N cannot be said to have held dominion over the sky in the same manner as did the Moon, he might seem the less important member of the pair were it not that he appears much more frequently in Maya art than does *Ixchel*. Probably we should see the two as equal, and view their union as a doubly strong metaphor in Maya religious thinking.

Though there is a fairly clear theological basis for the pairing of the two deities, the explanation for the seemingly erotic nature of their union is a bit more elusive. The possible interpretations of the gods' pairing are legion, but the procreation/birth symbolism associated with *Ixchel* and presumably extended in part to God N through the shell symbol suggests that the scene may be a metaphor for creation or re-creation. The shell may reinforce the meaning through its association with water and hence, in



Left: God N emerging from a shell, height 8.8 cm. From a 15th-century A.D. offering at Lamanai. (Drawing by Louise Christianson)





*Left: God N looking a little flabby in his old age. From an Altun Ha bowl, ca. A.D. 550–600. (Drawing by Rita Granda, ROM)*

Maya religious logic, with fertility. Perhaps the Moon Goddess, whose celestial embodiment was renewed every twenty-eight days, is revitalizing the aged God N through their union while they are jointly engaged in renewing the forces of nature. There was surely once a tale in Maya mythology that explained the scene, but in its absence we can only propose an explanation for which, unhappily, no solid proof can be offered.

The Lamanai figurine does not add to our meagre store of knowledge about the union of the Old Shell God and the Moon Goddess, but it does tell us something about the importance of that union in Maya belief. The figurine's presence amidst domestic refuse and its simplicity of manufacture show that it was a household object. The form of the base suggests that the piece was intended to be set on a table or bench or perhaps on a domestic altar. At any rate, it is clear

that by the 14th century the pair of deities had made their way into the homes of the Maya, whereas earlier their depictions were seen mainly on the public ceremonial stage. While the existence of the Ixchel-God N pair in the home may reflect changes in religious practice, it must also show how deeply the significance of the couple ran through Maya life.

The Lamanai piece may be the latest representation of the paired deities that has been found in the Maya Area, and is evidence that the conjoined gods maintained their importance as much as eight hundred years after their earliest known appearance in Maya art. Sadly, the symbolism constituting that importance, together with so much of ancient Maya culture, has failed to survive the centuries; we are left with only the simple little figurine to show that Ixchel and her aged shell-bound lover once held sway at Lamanai.

David Pendergast, Department of New World Archaeology Curator, is seen here with his wife, Elizabeth, excavating an offering at Lamanai, where he has been directing work since 1974. The ninth season of the project is now under way, as the second volume of his final report on the Altun Ha excavations goes to press and the third nears completion. Volume 1 of *Excavations at Altun Ha, Belize, 1964–1970* was published by the ROM in 1979.





# Recent and Forthcoming Publications

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**Shrubs of Ontario**, ROM Life Sciences Miscellaneous Publication, James H. Soper and Margaret L. Heimbarger, 528 pp., illustrated, \$20.00 paper

A comprehensive volume containing detailed scientific descriptions of more than 200 species of the shrubs of Ontario, each with a full-page illustration and a map showing its distribution. The text also contains the common name or names of the shrub, notes on habitat and North American distribution, and a field check to aid recognition. The book includes notes on botanical authors, a glossary, a bibliography, and an index containing both scientific and common names. As a field guide or manual to the shrubs of Ontario outside cultivation, this is an invaluable reference for naturalists and botanists, both professional and amateur, and for every inhabitant of the province who takes an informed interest in our natural environment. (Publication date: early 1982)

**The Late Babylonian Tablets in the Royal Ontario Museum**, ROM Cuneiform Texts, Volume II, G. J. P. McEwan, 128 pp., illustrated, \$10.00 paper

Though this is Volume II, it is the first volume to be published in the new series of Royal Ontario Museum Cuneiform Texts. In it the author has copied, collated, and presented an edition of all the Neo-Babylonian and Late Babylonian tablets in the ROM's collection. The contents constitute a representative cross-section of legal and administrative documents and letters from the Chaldean and Persian eras. (Publication date: early 1982)

**The Grimsby Site: A Historic Neutral Cemetery**, ROM, W. A. Kenyon, 264 pp., illustrated, \$35.00 cloth

In October 1976 a Neutral Indian cemetery was accidentally uncovered in Grimsby, Ontario. By April 1977 Dr. Kenyon and his team of archaeologists had uncovered 55 graves containing a total of 367 skeletons. Generously illustrated with hundreds of line drawings and photographs (some in colour) of the site, the graves, and their contents, this report documents each grave in detail. In the conclusion the author examines the three different types of graves at Grimsby; makes comparisons between Neutral burial practices and those of the Iroquois, Huron, Erie, Seneca, Wenro, and Mohawk; and discusses the "patterning in death" made evident by the alignment of the skeletons to the cardinal points of the compass. An outstanding contribution to our understanding of the history of Native peoples in Ontario.

**Chromosome Studies in *Sminthillus* from Cuba and *Eleutherodactylus* from Cuba and Puerto Rico (Anura: Leptodactylidae)**, ROM Life Sciences Contribution 129, James P. Bogart, 24 pp., illustrated, \$2.00 paper

**Llandoveryan Graptolites of the Northern Canadian Cordillera: *Petalograptus*, *Cephalograptus*, *Rhaphidograptus*, *Dimorphograptus*, *Retiolitidae* and *Monograptidae***, ROM Life Sciences Contribution 130, Alfred C. Lenz, 160 pp., illustrated, \$9.00 paper

**Palaeoecology of a Well-Preserved Crinoid Colony from the Silurian Rochester Shale in Ontario**, ROM Life Sciences Contribution 131, Carlton E. Brett and James D. Eckert, 24 pp., illustrated, \$2.00 paper

**A New Species of Bat of the Genus *Tadarida* (Family Molossidae) from West Africa**, ROM Life Sciences Occasional Paper 36, Mohammed A. El-Rayah, 12 pp., illustrated, \$1.25 paper.

**The Influence of Ottoman Turkish Textiles and Costume in Eastern Europe**, ROM History, Technology, and Art Monograph 4, Veronika Gervers, 184 pp., illustrated, price to be announced.

Through a detailed discussion of the popularity and widespread use of Turkish textiles in eastern Europe from the 14th to the early 20th century, the author provides a comprehensive assessment of their cultural impact on the region. In the course of the inquiry she surveys the sources for such a study using, among other documents, trade records, inventories, and private correspondence. Copious illustration is provided from the rich resources of the Royal Ontario Museum. (Publication date: spring 1982)

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# The Growing Collections

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The Cree Indians of the James Bay area of the eastern Subarctic have traditionally depended upon geese as a source of food. Historical documents relate how great numbers of geese were often killed in one day's hunt, and stories recount that starvation, caused by the hardships of winter, was evaded only by the arrival of geese in the spring. The Cree hunter lured the geese within range of his weapons by imitating the call of the goose and by using decoys.

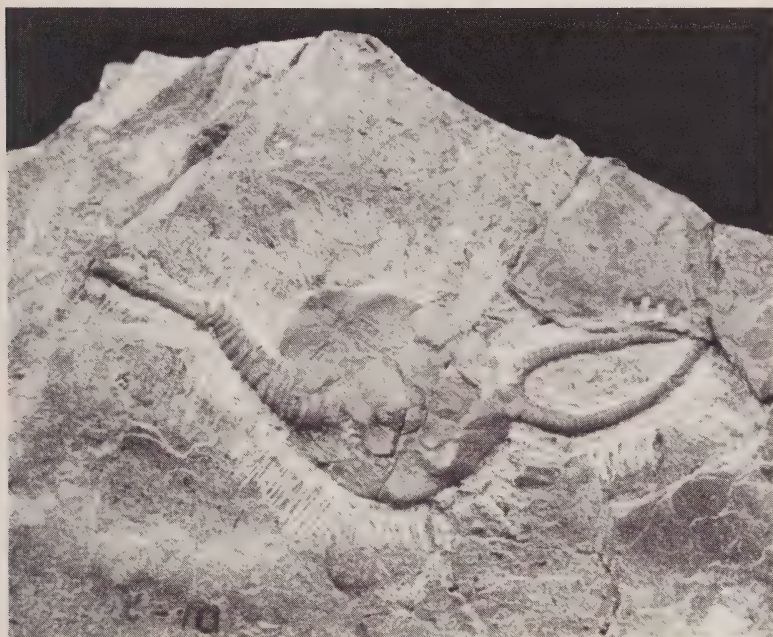
Drawing upon their knowledge of making decoys, the Cree Indians of James Bay have created twig geese. One such goose, illustrated here, has been recently acquired by the Department of Ethnology. It is made of twigs from willow and tamarack trees bent and tied into the form of a goose. Due to their simplicity of design and beauty of form, twig geese have become popular as decorative items. Their popularity has prompted the development of their manufacture as a cottage industry by the Cree.

Cree hunting decoys, by contrast, are quickly made and are relatively crude; few reach the sophistication of the twig goose in the illustration. Some traditional decoys have bodies roughly carved from one piece of wood with a separate carved piece attached to form the neck and head. Perhaps the most popular method of manufacture is one employed at the hunt site. The body is moulded with mud, with a willow twig forced into it to form the neck. A styrofoam cup or the inner tube from a toilet paper roll is then added to represent the white head of the snow goose. Another type of decoy consists of willow twigs of an appropriate length folded and tied to form the body, with a stick inserted vertically to form the neck.

Although different in technique and craftsmanship, twig geese are a refined version of a traditional form of hunting decoy. The purpose of each, however, is very different; twig geese are made to please the human eye rather than to deceive the eye of the goose. In addition to their aesthetic role twig geese symbolize contemporary Cree culture and its interaction with the social and natural environments.

K.R.L.





Middle Ordovician rocks of southern Ontario have been yielding superb specimens of fossil invertebrates to diligent collectors for a century and a half. A resurgence of interest, among both professional and amateur palaeontologists, has recently produced an abundance of fine material.

Among the hundreds of exceptional specimens added to the reference collections of the Department of Invertebrate Palaeontology this past summer are representatives of the extinct echinoderm classes Cystoidea and Edrioasteroidea. Edrioasteroids are typically rare elements of marine Ordovician faunas, and the form illustrated, *Cryptogoleus* (right), from the Verulam Formation at Lakefield, is seldom encountered. These peculiar animals lived permanently attached to a hard substance, such as a rock or shell, and filtered minute food particles from the surrounding seawater. The cystoid *Pleurocystites* is thought to have been a mobile animal able to propel itself along the seafloor with its flexible stem while probing in the mud for nutrients with the pair of anterior "arms". *Pleurocystites* is commonly found as disarticulated fragments; virtually complete specimens, like that pictured here (above, left) from the Bobcaygeon Formation near Brechin, are not easily collected. A third class of echinoderms, the Crinoidea, has living representatives in present-day oceans. Middle Ordovician forms like *Glyptocrinus* shown (above, right) were once abundant in the shallow subtropical seas that covered Ontario about 450 million years ago. Only the "head" of the crinoid is illustrated; the characteristic stem was removed to allow for preparation. The specimens of *Glyptocrinus* and *Pleurocystites* were part of a recent purchase. The *Cryptogoleus* was collected by staff members this summer.

D.M.R.



Photos: p. 14 Brian Boyle, Photography Department, ROM and p. 15 David Rudkin, ROM.







# "Very Choice Italian"

## *Italian Art at the AGO*

K. Corey Keeble

Opposite page, top: Dish with a scene of a Roman feast after an original design by Taddeo Zuccaro. From the Fontana workshop at Urbino, mid-16th century. Tin-glazed earthenware. ROM collection.

Opposite page, bottom: View of Florence.

ON 19 DECEMBER 1981 an exhibition of Italian art from the 14th to the 18th century opened at the Art Gallery of Ontario. It is composed primarily of items drawn from collections in and around the Toronto area, many of them in private hands. The Art Gallery of Ontario has mounted the exhibition and the Royal Ontario Museum is honoured to be among the principal lenders to it. The exhibition is thus a landmark in the history of two of Toronto's major public institutions; this is the first occasion on which the Italian collections of the AGO and the ROM have been combined. Now visitors can see paintings, drawings, and graphic works from the Gallery and sculpture, ceramics, furniture, glass, silver, arms and armour, and textiles from the Museum on display together.

The exhibition fulfils a longstanding aim of its organizers—to focus the attention of the Toronto public on the variety and richness of Italian art in its midst. The choice of an Italian exhibition was an easy one to make. The Gallery's and Museum's collections of Italian art are among the largest and most important in Canada; the city and surrounding area are blessed with many private collectors who have devoted much energy and love to collecting Italian art and who have been overwhelmingly generous in their support of the exhibition. In addition, the Toronto area has the significant cultural asset of one of the largest and most active communities of Italian heritage outside Italy itself.

It is hoped that the exhibition will be appreciated both for its obvious visual appeal and for its remarkable diversity. The diversity of the exhibits points to the complex interrelationships that exist among the arts of all periods; in this particular case it also bears witness to the creative genius that informed all of the arts in Italy, and from the Renaissance onwards exerted a powerful influence on the direction of the arts of virtually all Europe. Stylistic features derived from the Italian Renaissance spread throughout Europe in the course of the 16th century, and later the style now known as baroque was itself disseminated not only throughout Europe but even to the shores of the New World. For centuries Italy remained the source from which artists of all nationalities drew inspiration, which they found in the great monuments of classical antiquity, as well as in Renaissance and baroque art. Nations set up academies in Rome for the instruction of generations of pupils. Some artists visiting Italy from distant lands were so deeply influenced by what they saw that they remained permanently, becoming in effect naturalized Italian artists. Among them were such brilliant masters as the French 17th-century painter Poussin, who in the history of art is to all intents and purposes an



Italian painter, and the sculptors François Duquesnoy and Jean de Boulogne. Duquesnoy, a Fleming, became one of the great masters of Roman baroque sculpture, and his earlier compatriot, known to successive generations by his italianized name of Giovanni Bologna, became perhaps the greatest sculptor active in Florence after the death of Michelangelo.

It was not only painting and sculpture that were pervaded by Italian influence from the time of the Renaissance onwards; music, literature, and social custom were also affected by it. In music, of course, the Italian impact is obvious in the terminology of the art, which even today remains Italian. Less obvious but equally important has been the influence of Italian literature on that of other European countries. English poets, even in the Middle Ages, were susceptible to the influence of Italian poets—Chaucer is the supreme example. At the time of the Renaissance the preoccupation with all things Italian is evident in the plays of Shakespeare; several of his plays are set in Italy and the titles themselves reflect the “italianizing” of European culture—*Two Gentlemen of Verona*, *The Merchant of Venice*, and even *Romeo and Juliet*. From *Hamlet* (III, ii) comes the title of this article: “The story is extant, and written in very choice Italian.”

The English passion for Italy, once acquired, was

never forgotten: it seems almost to have been passed on through the blood. Generations of English travellers trekked across Europe bound for Italy, one of the principal stopping places of the Grand Tour. In the 18th century, for example, the Duke of Marlborough became a patron of one of the last great Florentine bronze sculptors, Massimiliano Soldani-Benzi, from whom he acquired bronze replicas of antique statuary in the Uffizi for the decoration of Blenheim Palace. Such examples of contact with Italy through the Grand Tour could be multiplied thousands of times over, to include travellers not only from the British Isles, but from France, Germany, the Netherlands . . . and on and on.

Communication of Italianate ideas often took place through personal contact of the traveller, whether tourist or artist, with the masterpieces that abounded in Rome, Florence, and Venice. But there were other means as well. In Renaissance Italy the printing press assumed an importance in the transmission of visual images comparable with that of television in our modern culture. Both the glories of Italy's Roman past and the most up-to-date artistic compositions could be recorded in graphic form and circulated to a vast and enthusiastic audience. The importance of woodcut and engraving in spreading artistic ideas and compositions had been well







*Opposite page: A Triumph, after Raimondi, engraving on laid paper, by Agostino Veneziano. Art Gallery of Ontario, Toronto. (34.5 cm × 49.9 cm)*

*Left: Lamentation with Saints and a Donor, oil on canvas, by Bartolommeo di Giovanni, ca. 1500. Art Gallery of Ontario, Toronto. (163.8 cm × 191.8 cm)*

demonstrated in the Netherlands and Germany with the works of such masters as the Master E.S. and Martin Schongauer. In Italy the same techniques now made possible the circulation of the most advanced examples of Italian Renaissance composition and style to an international audience. The Italian exhibition at the AGO has several sub-themes: one of the most important concerns the transmission of information relating to style, and in this engravings and etchings played a prominent role. It was typical of the Renaissance tendency constantly to upgrade the status of art forms that engravings, so important as vehicles for the communication of form and style, came to be regarded as works of art worthy to be collected in their own right.

Among the most prominent Italian engravers of the Renaissance were the Bolognese Marcantonio Raimondi and his followers and pupils, including Agostino Veneziano da Musi born in Venice around 1490 and later active in Florence and Rome. An engraving in the exhibition by Agostino Veneziano of a Roman triumph is typical of many engravings of the early 16th century. The scene is a welter of classical detail reminiscent of the quattrocento tradition of Mantegna and of the even more pronounced classicism of the early cinquecento, evoking the rich classicizing imagery of North Italian sculpture—of marble reliefs by the Lombardi of Venice, bronze reliefs by Andrea Briosco at Padua, and plaquettes by the North Italian known by the sobriquet, “Moderno”. Hints of Giulio Romano and Raphael are also in evi-

dence—for example, the woman in the foreground with her head draped in a kind of turban with a chin-strap. The same feature occurs many times in the works of Raphael and his followers and is a reminder of the 16th century’s blending of classical and modern detail in the form of artistic conventions. The long curling locks of two of the male figures in the foreground also reflect 16th-century convention rather than the realities of the classical past; the long hair typifies Italian fashion of the early 1500s.

It was through woodcuts and engravings that jewellers and goldsmiths drew their inspiration for their work. So did lacemakers; books of patterns for lacemaking appeared in Italy in the 16th century, many of them published in Venice. Engravings were equally useful to the decorators of the type of pottery known as maiolica. Maiolica, as a technical term, refers to earthenware pottery covered with an opaque white glaze formed by the addition of tin oxide. Tin-glazed pottery originated in the ancient Near East and became prominent in Italy during the 15th and 16th centuries. The white ground provided an admirable surface for painted decoration, and maiolica wares of princely splendour, valued as highly as the choicest objects in gold and silver, soon emanated from the potteries at Urbino, Casteldurante, Siena, Faenza, and other Italian centres.

Among the decorative features of Renaissance art circulated through engravings were designs of trophies. Trophies are a Renaissance *leitmotif* and they occur everywhere—in stone carving, in furniture,



and in painting. They can be seen in the foreground of Agostino Veneziano's Roman triumph in a great pile of shields, bows, quivers, and armour. They also appear in maiolica painting, notably in the works from the potteries at Casteldurante and Venice. Trophies remained in use for a long time and in Sicily endured into the 17th century in maiolica made principally at Palermo but influenced by Casteldurante and Venice prototypes. The line of communication is therefore a long one, in terms both of time and of space, operating by a kind of artistic chain reaction.

If the Renaissance tended to increase the status of individual artists and to elevate virtually all human activity to an artistic level, it also brought about a marvellous union of creative minds and talents. One of the foremost painters of the 16th century, Taddeo Zuccaro (1529–1566), for example, was called upon by Guidobaldo II, Duke of Urbino, to design an elaborate maiolica table service intended as a gift to the King of Spain. Zuccaro's designs have been preserved, including a drawing of a Roman feast now in the Louvre. In the maiolica collection of the ROM is an Urbino dish produced from the same design at the celebrated Fontana workshop; but, as was usual with the Urbino maiolica painters, the details show many subtle and minute variations from the original.

Zuccaro's involvement in the design of a maiolica table service underlines the versatility of Renaissance Italian artists, a versatility evident not only in such artistic giants of the period as Michelangelo Buonarroti and Leonardo da Vinci, but in other ar-

tists as well. In 15th-century Florence, for example, interaction among the arts often brought painters and sculptors together. The AGO's impressive late 15th-century Florentine altar painting of the *Lamentation* is attributed to a painter, Bartolommeo di Giovanni (active 1480–1500), who was a member of a family of artists that included illuminators of manuscripts, engravers, mosaicists, and painters of stuccoes. Stucco sculpture was usually polychromed, often by artists who also worked independently as painters of religious panels. Evidence of such collaboration is afforded by a charming little stucco relief in the ROM's collection. It depicts the Madonna and Child and is based on a lost original composition by Luca della Robbia. The relief, mounted in a gilded wooden frame of architectural form, features not only polychrome treatment of the draperies of the Virgin and Child but also a delicately painted background of a wall and trees. Such reliefs, often of great charm, were cheaply produced and, like engravings, contributed to the circulation of specific compositions by major artists. They are an important part of the history of both sculpture and the communication of artistic form.

The *Lamentation*, unlike engravings or stucco reliefs, is a unique object, a one-of-a-kind phenomenon. It may be appreciated as an autograph work by a significant late quattrocento artist, but like the other exhibits, it too is part of a fascinating matrix of artistic interrelationships and influences. Bartolommeo di Giovanni has been recognized as a pupil and follower of Domenico Ghirlandaio (1449–1494), whose

*Left: Madonna and Child after Luca della Robbia. Painted stucco with wooden frame, before restoration. ROM collection, Reuben Wells Leonard Bequest. (41.0 cm × 26.5 cm, without frame)*

*Opposite page: Adoration, glazed terracotta, from the workshop of Andrea della Robbia, ca. 1480–1500. ROM collection, gift of Ten Friends of the Museum.*







influence is clearly evident in the details of the *Lamentation*. This painting, therefore, provides evidence of how aspects of a particular style were transferred from one artist to another, in this case, from master to pupil. There is more to it than that, however, for the *Lamentation* is an absolutely classic example of a Florentine religious work of the years around 1500. The same precision of line, the same delicate graceful treatment of form and gesture also occur in contemporary Florentine sculpture, notably in the terracotta reliefs of Andrea della Robbia (1435–1525) and his workshop. It is significant for the exhibition that it includes both the AGO's splendid *Lamentation* and the ROM's della Robbia relief of the *Adoration* of approximately the same date.

Textiles, themselves an art form, were of major importance to the economy of many Italian cities at the time of the Renaissance. The wealth generated by textile manufacture brought Italian textile guilds to levels of great power and prestige in their cities. Their wealth in turn enabled the guilds to become enlightened patrons of the arts; in Florence the wool merchants' and wool manufacturers' guilds were the most prominent patrons of the sculptor Lorenzo Ghiberti, and the linen weavers' guild commissioned one of Donatello's earliest and greatest masterpieces,

the St. Mark of 1411–1413, for the Florentine guild church of Or San Michele.

Among the textiles in the exhibition are Italian silks of the 15th century from the ROM's collections with motifs of stylized flowers with broad wavy stems. The basic pattern, known to modern historians as the "pomegranate" pattern, appeared endlessly in the rich brocaded velvets that formed part of an extensive export trade from Italy to France, Germany, the Netherlands, and beyond. These rich fabrics are depicted in the paintings of virtually all Italian schools of the 15th century, but appear in equal profusion and convincing detail in the paintings of the great Netherlandish masters of the same period; for example, in the works of Jan van Eyck, Roger van der Weyden, and their contemporaries. The appearance of these brilliant silks in such works is an eloquent testimony to Italian influence beyond the Alps. The textiles in the exhibition, then, are both works of art in their own right and reminders of their economic importance and of the part that their guilds played in patronage of the arts.

In contrast to the great monumental public works commissioned by ecclesiastical and lay patrons, statuettes and drawings are representative of art forms ideal for intimate private study and contemplation.



Below: Length of velvet, with blue pile, gold brocaded ground, from Venice or Florence, ca. 1480–1500. ROM collection. (137.0 cm × 58.5 cm)



In emulation of the Roman passion for the statuette, this art form was consciously revived during the Renaissance. As an adjunct of the cult of antiquity, bronze statuettes enjoyed great popularity in the north of Italy in the early 1500s, notably at Padua. They were ideally suited to the collections of Renaissance scholars and aristocratic connoisseurs, and were appreciated for their beauty of form, quality of craftsmanship, and associations with the antique.

An enlightened taste for bronze statuettes also emerged in 16th-century Florence under Medici patronage, bringing the art to its highest development in the exquisitely crafted bronzes of Giovanni Bologna (1529–1608) and his workshop. The Florentine bronze occupies a special place in the development of Italian art. It continued to flourish into the 18th century and reached a glorious late flowering in the brilliantly executed baroque small bronzes of Massimiliano Soldani-Benzi (1656–1740) and Giovanni Battista Foggini (1652–1725).

Drawings were particularly significant as an art form in that they were the very foundation of the stylistic development of Renaissance and baroque artists. In the Tuscan Academy in Rome in the late 17th century, for example, artistic training began with the art of drawing: drawing after antique monuments and after the great Renaissance masters, and the drawing of live models as well. In addition to their importance in the formal training of artists, drawings represent the most intimate revelation of an artist's thinking; they are projections of thought metamorphosed into line, shade, and wash. Some Old Master drawings are characterized by great detail, others by an extraordinary economy of line. An example of the latter is a splendid little sketch in the exhibition attributed to Luca Cambiaso (1526–1585) that represents a figure of a seated Roman. As a symbol of the diversity of the exhibition of Italian art at the AGO it is ideal. The drawing is a sketch for a painting, probably a fresco for a pendentive. As such, it recalls at once a sculptural form, Michelangelo's effigy of Lorenzo de Medici, Duke of Urbino, in the Medici Chapel of the Florentine church of San Lorenzo. In itself, it is a wonderful example of economy and spontaneity and at the same time evokes the ethos of a whole culture, comprising in a single image a whole world of classically inspired heroic form. It relates to the classical past but also to the vast array of heroic figures seen in the paintings of Francesco Salviati, Taddeo Zuccaro, and Francesco Morandini; in the sculptures of Michelangelo, Baccio Bandinelli, Benvenuto Cellini, Vincenzo Danti, Leone Leoni, and hosts of others; in maiolica decoration, and even in the marvellous parade armours in "Roman" fashion made by Filippo Negroli and Bartolommeo Campi for the princes of the Renaissance.

Luca Cambiaso's little sketch of a single seated figure is like a key that opens a door to an incredibly richly populated world of artistic form—varied,



Right: Figure of a Seated Roman, pen, brown ink and wash drawing, by Luca Cambiaso. Art Gallery of Ontario, Toronto, gift of Mrs. R. Y. Eaton, 1964. (27.4 cm × 18.7 cm)



complex, but constituting nevertheless a comprehensible entity with every part linked to all others. It is a reminder, inherent in all works of art, of art's power to stimulate the imagination and to set the mind on infinite paths of exploration and discovery.

Dedicated to the memory of Walter Vitzthum and Theodore Allen Heinrich, the exhibition has been coordinated by Katharine Lochnan, the AGO's curator of prints and drawings. The illustrated exhibition catalogue was written by Katharine Lochnan, David McTavish of Queen's University, Sibylle Pantazzi, former head librarian of the AGO, and K. Corey Keeble of the ROM.

K. Corey Keeble is Assistant Curator in the European Department of the ROM. After receiving his undergraduate degree in English and history from United College (now the University of Winnipeg), he spent two years in England on postgraduate work at the Courtauld Institute of the University of London. Although interested in 15th- and 16th-century armour and German Late Gothic panel painting, Mr. Keeble now concentrates his studies on Renaissance and baroque bronze statuettes and terracottas. The result of these studies, *European Bronzes in the Royal Ontario Museum*, will be published by the ROM in 1982.



Photos: Photography Department, ROM; p. 16, bottom, K. Corey Keeble, ROM; pp. 18, 19, 23, courtesy of the Art Gallery of Ontario.



Right: Closed gowns did not require a petticoat to complete them. This example of brown silk brocaded with multicoloured flowers is English from the 1740s. The skirt has a drop front; each side of the centre front panel is unseamed to a depth of about 30 cm. When drawn up the panel was tied around the waist inside the bodice with attached "apron strings". The bodice was pulled together at the waist thereby creating two deep folds in the skirt. The result resembled an open robe with a matching petticoat.



# The Beginning of Couture

*Women's 18th-Century Fashion in the ROM*



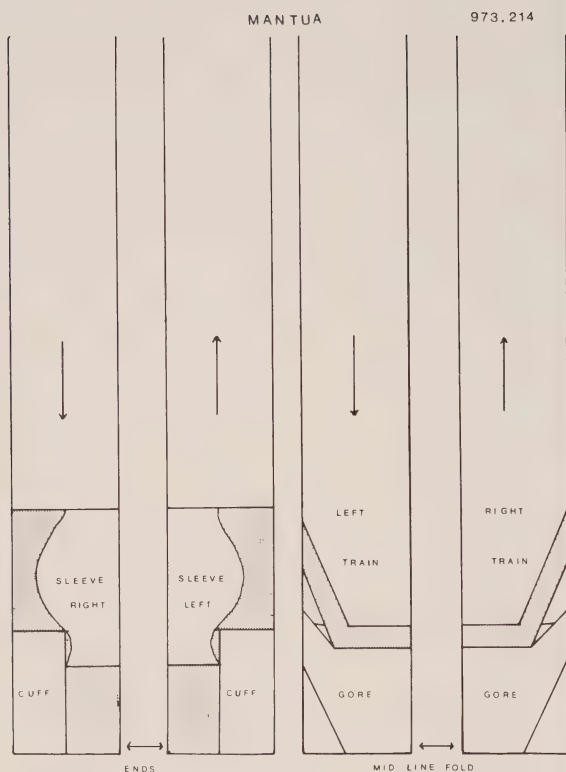


Left: One of the most sumptuous gowns in the collection is a sacque made of bright yellow silk brocaded with silver thread and trimmed with silver braid and lace. It has a matching petticoat and stomacher. Instead of cuffs it has gathered sleeve flounces, which were more suitable for formal wear and were first introduced at court in the late 1730s. By the 1750s most gowns were shaped by cutting the front of the bodice in two separate pieces; this produced a waist seam in front. Applied bands called robings now generally replaced the folded vertical borders. The strong colour was very popular and when combined with sparkling jewels and trimmings it would have been very effective in the soft glow of candlelight. This mid-century English dress is the gift of the Fashion Group Inc. of Toronto.

## Mary Holford

THE TEXTILE DEPARTMENT plans to open the new costume gallery with an exhibit of 18th-century women's dress. A selection of garments from the ROM's fine collection will illustrate the evolutionary changes that took place when seamstresses assumed the role of fashionable dressmakers. Until the last quarter of the 17th century, women's gowns traditionally were made by male tailors (cutters). The tailor's skills were essential to the development of both men's and women's fashions, and women's dresses with rigidly boned bodices were constructed by these qualified craftsmen. Seamstresses, not being trained in the art of cutting, made much simpler informal garments.





Above: A mantua and its cutting scheme. This rare gown, dated 1709–10, is probably English. The brown and silvery white silk damask is thought to have been woven in the Netherlands. Essentially it was made of two lengths of silk passed over the shoulders and seamed together at the centre back and sides. The upper part of the gown was fitted almost entirely by tucks and pleats. The front edges were folded back to form borders to the waist. The

foureaux bodice was worn over a separate stayed underbodice. The elbow-length sleeves were finished with large rectangular cuffs. Characteristic of the mantua was its trained skirt, which was turned back at the front edges, draped, and fastened at the hips. The mantua was worn with a petticoat, a decorative stomacher to fill in the open front of the bodice, and lace or linen accessories.



In the late 17th century, however, although the stiff-bodied gowns remained *de rigueur* as ceremonial court wear, a completely new style of gown supplanted them as fashionable attire. Now, for the first time, informal *négligé*, in the form of simple T-shaped coats or wrapping gowns, had become an accepted part of fashion, and provided the basic structure for 18th-century gowns.

The influence of Eastern culture, which permeated western Europe during the latter half of the 17th and much of the 18th century, added to the popularity of *négligé*. At first these casual gowns were imported as men's wear. Some were brought home by prosperous nabobs returning from the East, where they had adopted a dress similar to that of the princes and potentates among whom they lived. In Europe the novel and colourful garments first appeared as house gowns and were considered appropriate for entertaining at home. (Loose wrapping gowns were often seen in portraiture of the period because they could be artistically draped.) Very soon women copied and adapted them for a variety of informal uses. These

unstructured, unboned adaptations were usually made by seamstresses and, as the gowns became more complex, the seamstresses became more specialized. In 1675 specialized seamstresses in Paris were granted the right to form a guild; they called themselves the "*Maîtresses Couturières de Paris*". The English equivalents were known as "*Mantua makers*".

For much of the 18th century the designs of new dress silks were indicative of the latest fashion. Since the weaving of these patterned silks was intricate and time-consuming, they were very expensive and had to be cut economically. Ideally, when a gown was to be cut, its various parts were arranged so that the motifs of the silk would be balanced or symmetrical on the made-up garment. The length of the pattern repeat and the dressmaker's skill in planning the cutting sequence were important for success. Nevertheless, precise symmetry could not always be obtained, since the hand-woven pattern sometimes varied in length by as much as five or six centimetres. Silks woven in Europe were narrow,



*Left: As early as the 1760s false waistcoats sometimes were worn instead of stomachers with open bodices. The example illustrated is stitched inside the front edges of the gown so that it is virtually a part of it. This was the first step leading to the general style of closed bodices, and it reflects the growing influence of men's wear on women's fashion.*





Above left: This overgown and petticoat were brought out from England by an ancestress of the donor, Miss Joan Arnoldi. Made of pink silk tabby and dated to about 1780, this gown could be worn either with the skirt hitched up in three characteristic puffs or full length. Until this period the backs of gowns were cut without waist seams, but in this later style, known as a robe à l'anglaise, the back was cut in a deep point that completed the waist seam all round. The foreparts were closed and the sleeves, now lengthened to below the elbows, had fashionable ruched cuffs.

Above right: This painted Chinese silk gown of the 1740s is a *sacque* or robe à la française with double box pleats across the back of the shoulders. Wide hooped skirts were fashionable during this decade, but they continued to be worn with very formal gowns until the 1770s.



usually between 43 and 56 centimetres from selvage to selvage. They were produced in lengths, called "pieces", that are estimated to have measured about 50 metres. The more pieces woven in the same pattern, the more economical the process—but, even so, the number of pieces of any one pattern was definitely limited, and there was no thought of producing the same dress *en masse*.

The exclusiveness of the silk designs made it pointless to publish detailed cutting instructions; dressmakers had to use their own ingenuity and adapt to each new pattern. The design of the silk in relation to the made-up dress can easily be seen, but it is more difficult to assess how economically the material has been used. But this must have been a matter of considerable consequence, if not to the dressmaker, at least to the customer who had to foot the bill.

The mantua was a particular style of informal gown, named from a quality of silk which may have been first made in the Italian city of Mantua. Mantuas can be traced back to the 1660s and were the height of fashion from about 1680 to 1710. After that, they became more and more formal, until they were relegated exclusively to court functions. Although



Right: Woman's open robe of striped and figured satin, French, 1780–85. The long narrow sleeves and cut-back skirt reflect the influence of men's tailoring on women's popular fashion. This gown has been beautifully finished inside with a curved bone set horizontally at the base of the bodice to emphasize the fullness at the back of the skirt.



they are occasionally mentioned in documents of the third quarter of the 18th century, they soon became obsolete.

The mantua is an important link in the chain of fashion because it illustrates the initial transition of a simple T-shaped coat to a stylish gown and shows the early phases of 18th-century dressmaking. Because the hand-woven patterned silks were so expensive, dresses were often remade several times—and by succeeding generations—to keep up with changing fashions. The simplicity of early garments such as the mantua made them particularly vulnerable since they could so easily be cut up and restyled. The ROM is among the few museums to possess an early, unaltered mantua.

With the introduction of hooped petticoats around 1710, the skirt of the mantua was readjusted, but the upper fitted part of the gown, called a sheath or *fourreau* bodice, remained basically the same. Other gowns with *fourreau* bodices also appeared. Then a different style was introduced in France. This was the *sacque* or *robe battante*. At first it was a very full tentlike garment that spread out all round from pleats across the shoulders. Unlike the mantua, the skirt was usually closed in front below the waist.

The *sacque* was not accepted as fashionable attire until after the death of Louis XIV in 1715. Doubtless he considered it too loose and casual looking to meet his rigid standards. But the regents of Louis XV (b. 1710, d. 1774) were much less exacting about the etiquette of dress at court, and the *sacque* appeared forthwith. It was very popular in France throughout the 1720s and 1730s, though it never achieved the same acceptance in England.

When Louis XV began to assume control in the 1740s, he felt obliged to follow the precepts of his great-grandfather, and from this time there were further changes in style. The *sacque* began to be formalized as an open robe. Its loose full front was fitted to the shape of the stayed underbodice. The excess width at the back was folded into a pair of deep double or treble box pleats that were stitched across the shoulders and flowed in an unbroken line to the hem, adding a graceful dignity in keeping with formality. This version was known as a *robe à la française*. Like the mantua, it became increasingly formal, and by the last quarter of the century was relegated to full dress. The novelist Fanny Burney recorded in her diary in 1782 the following conversation between two ladies.



Right: Tailored riding jackets were part of the fashionable woman's wardrobe throughout the 18th century. This English riding jacket of 1730–50 is made of natural cream-coloured wool with pale blue satin collar and cuffs trimmed with silver braid. Traditionally, it was a masculine type of garment; the flat collar is typical of men's 18th-century frock coats. This jacket was worn with a white linen waistcoat and a skirt, then called a petticoat.



"How disagreeable these sacques are! . . . Am going to Cumberland House are you?"

"To be sure, what else do you think would make me wear this weight of dress? I can't bear a sacque."

With the acceptance of more comfortable, light-weight dresses, the sacque had become a burden to be borne only on special occasions.

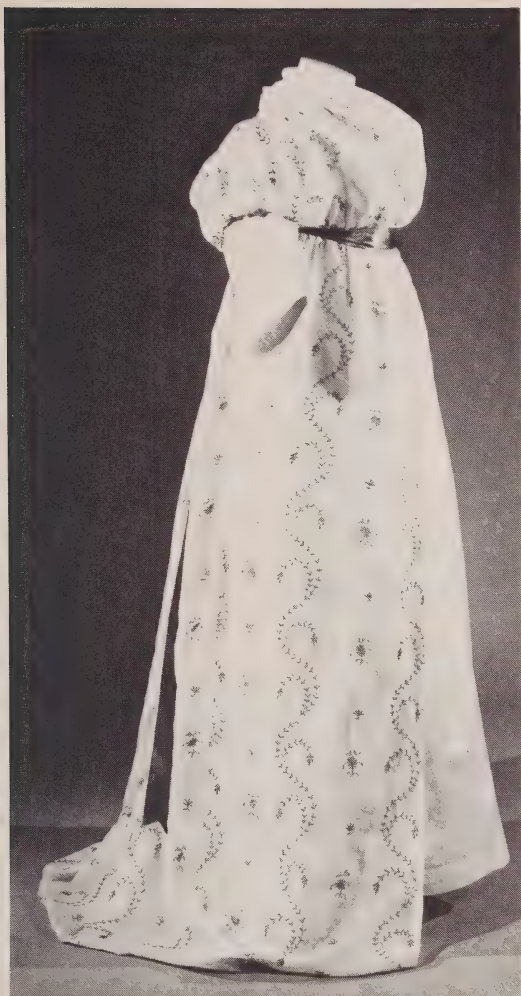
By the last quarter of the 18th century changes in fashion had accelerated and styles became more varied. Everyday fashions became more "democratic" as they grew apart from the strict formality of full dress and ceremonial apparel. Many influences—social, economic, and technical—contributed to these changes. With increased trade during the latter half of the 17th century, imported Indian cotton, particularly chintz, had a revolutionary effect on European taste and fashion. But cotton posed such a serious threat to silk and woollen manufacturers that it was banned or heavily taxed during much of the 18th century. These restrictions merely added to its popularity and stimulated research into improved methods of manufacturing and dyeing. Finally, imported cotton cloth was superseded by more efficient European production, and cheaper cotton was made available to everyone. Lightweight materials affected cut and style, and the small scattered motifs did not have to be strategically positioned on the garment.

In the last quarter of the century there was an increased demand for accessories and trimmings, and this resulted in more specialized trades. Foremost among these was millinery. Milliners not only made and sold accessories but also designed trimmings and applied them to gowns and headdresses. Applied design was an important fashion feature, and milliners were the fashion designers of the day.

Two prevalent influences on women's fashions of the late 18th century were the clothes of rural and working women, which inspired light informal wear, and English tailoring, which inspired a masculine look. Often the two were combined with dramatic effect—for example, shorter petticoats, hitched-up overskirts, and picturesque hats were worn with false waistcoats and watch fobs. (In the 18th century a "petticoat" was an under- or overskirt, whereas a "skirt" was the lower part of a coat or jacket.) A variety of jackets, capes, and cloaks were popular. By the late 1780s long coats and coat dresses were in vogue; these reflected the influence of men's wear, notably in the use of collars and long coat-sleeves.

The waning prestige of court-dictated fashion, democratization, and new manufacturing techniques all fostered a wider variety of fashionable styles toward the end of the 18th century than at the beginning. But in the evolution of fashion there is really no stopping point and many characteristics of 18th-century dressmaking continued through much of the following century.





Left: An English coat dress of 1795–1800, made of white muslin embroidered with flat silver gilt. Muslin, hitherto used mainly for accessories, was now much in vogue as dress material. Unlike the earlier heavy silks, it could be softly gathered and more easily shaped to rounded contours. Stitching was easier and most dresses of this period were sewn with finesse. New features on this gown are the high waistline, rolled collar, and short full sleeves. These exemplify the transition from 18th- to early 19th-century styles.

Below: A detailed view of a printed cotton overdress (English, 1775–85) called a polonaise. The matching false front is sewn in at the side seams and the outer front edges slope back from a closed neckline. The style is reminiscent of men's cut-away coats.



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Photos: Photography Department, ROM.



# Oystercatcher Mecca

## *Impromptu Field Work in Southern Argentina*

Allan J. Baker

A FIELD TRIP THAT SUCCEEDS against very long odds is a satisfying experience. But when the work is done in a country as beautiful as Argentina and when the odds are as long as they were in this case, there is a delicious pleasure in recalling the adventures of three weeks of impromptu field work in southern Argentina.

For six months before my visit I had been writing letters to various biologists in Argentina asking about places where I could study my ornithological speciality, a family of shorebirds called oystercatchers. There are only ten species of oystercatchers in the world and three of them live in Argentina. For someone writing a book on the biology of the world's oystercatchers, as I am, a field trip to Argentina is therefore absolutely imperative.

All letters were in vain, however, until I turned to Ron Meadows of the Department of External Affairs in Ottawa. Two days before my scheduled departure date, he succeeded in getting me an invitation to speak with wildlife authorities in Argentina who could assist me to do field work. I



Above: American pied oystercatcher leaving the nest at Punta Tombo. The mottled chest feathers suggest that this bird may be a hybrid of black and pied species.





phoned my colleagues Dr. Joseph Strauch, Jr. of the University of Michigan and Dr. Edward Miller of York University to ask them if they were reckless enough to come along on the spur of the moment to conduct some cooperative research we had mapped out previously. The three species of Argentinian oystercatchers had not been closely studied. We had planned to gather as much information about them as possible with motion picture cameras, still cameras, parabolic reflectors, and tape recorders. Eventually the tapes would be converted to sonagrams and amplitude profiles for further study. Individual frames of the motion picture films would be traced so that the birds' behaviour could be studied and reported in detail. While half suspecting that the whole project might be some hideous practical joke, my colleagues decided that it could be a once-in-a-lifetime opportunity and they decided to take the risk.

After an exhausting, nerve-racking flight in a vintage South American jet and the discovery that our collective grasp of Spanish was insufficient to order even a glass of Coca-Cola, our spirits were

*Below: A black oystercatcher protesting the author's presence at its nest at Punta Tombo. The shortness and bright red colour of the bill indicate that this bird is a male.*





lifted at Eziza International Airport in Buenos Aires by a foretaste of Argentina's ornithological delights—the melodious song of a chingolo sparrow. The next day the Public Affairs Officer of the Canadian Embassy, Monica Johnson de Escardo, told us about her negotiations with various authorities, and prescribed tablets with an unpronounceable name for the intestinal malaise that followed swiftly after breakfast. Later in the day we met Dr. José Maria Gallardo, Director of the Natural History Museum. Dr. Gallardo introduced us to Alejandro Lynch, our interpreter and research assistant, and advised us to go to Patagonia to do our field work.

Alejandro told us that Patagonia was the land in the provinces of Rio Negro, Chubut, and Santa Cruz south of the mighty Rio Negro. Literally translated, patagon means big foot. The fine book *In Patagonia* by Bruce Chatwin attributes the name to Magellan who perhaps had encountered a giant Tehuelche Indian wearing a dog-head mask. Patagonia has been notorious as the hideout for outlaws such as Butch Cassidy and the Sundance Kid. It was also in Patagonia that Charles Darwin found some of the first solid evidence for the theory of evolution.

Three days later we flew south to Bahia Blanca, leaving behind the lush vegetation of the Buenos Aires plain. South of Bahia Blanca the landscape changed spectacularly as our jet crossed the Patagonian Desert, heaving from side to side in a westerly gale characteristic of the “roaring forties”. The jet was brought to a shuddering stop on the runway

of the oil town of Comodoro Rivadavia, but in a short time we were up in the turbulent air again heading further south to our final destination of Rio Gallegos, near the southern border with Chile.

Rio Gallegos in late October proved to be a bleak place, having just emerged from the grip of winter. The airfield there was a military one, and because of the guerilla problem we were ushered at gunpoint to a room curtained off from other passengers for a full security search. Our cameras and tape recorders aroused so much interest that our other baggage escaped ransacking, but we had the strong impression that if we gave the slightest ground for suspicion, we could end up in prison in this lonely outpost.

From here on our trip was to be what every field biologist in a strange land dreads: taking each day as it comes and trying to improvise the way to success. Our big break came when we were introduced to Vcom(R) Carlos Enrique Infante Julio, Secretary of Agriculture for the province of Santa Cruz. Fortunately, he was a birdwatcher quite familiar with oystercatchers, and realizing our plight, he generously put a pick-up truck and driver at our disposal.

The next day we drove inland past the inevitable military checkpoints to the vast pampas of Patagonia. Several hours later our uncomfortable journey over gravel roads strewn with boulders and potholes halted at a cross-roads near which was a small building made almost entirely of corrugated roofing iron. This was the local hotel at Los Horquetas, which we



Above: The author photographing a group of sheathbills at Punta Tombo.







literally took over as our base.

Bird life was abundant on the surrounding estancias. Within hours we had identified military blackbirds, negritos, Sierra-finches, cinclodes, miners, earthcreepers, tyrant-flycatchers, pipits, caracaras, shelducks, seedsnipe, Patagonian snipe, plovers, lapwings, dotterels, and finally our quarry, the Fuegian oystercatcher. Because time was so short, we worked frantically from daylight to past midnight each day. Ted Miller worked the early morning shift, tape-recording the calls and filming the behaviour of oystercatchers from a canvas blind that we had erected near a nest. The rest of us worked a later shift, finding new nests, making ecological observations, and collecting precious material for the ROM's collections.

The Fuegian species proved to be unique among oystercatchers. Breeding adults display a tail-flagging behaviour when disturbed near the nest. An oystercatcher would rise from its nest, walk slowly away from it, then quickly raise its tail and expose its underside toward us. This is clearly a distraction display intended to draw potential predators away from the nest and eggs. Also, unlike all other oystercatchers, the Fuegian species' calls include a thin whistle-like alarm call. Two species of feather lice were collected from specimens and sent to Dr.



*Above, top: The field-work crew outside the hotel at Las Horquetas. From left to right: the author, Dr. Joseph G. Strauch, Jr., guide Alejandro Lynch, Dr. Edward H. Miller, and driver Luis Gomez.*

*Above: Sheathbills in their pristine white plumage at Punta Tombo.*



Theresa Clay of the British Museum for identification. Some time later Dr. Clay reported excitedly that they were both new to science, and that she had named one *Saemundssonina bakeri*. These and other differences from the rest of the species indicate that the Fuegian oystercatcher is the most primitive member of the family.

Normally the field work involved in such observations is routine, but in windy Patagonia even simple procedures became difficult. One morning we awoke to gale-force winds and discovered that our blind had been blown away; we eventually found it almost a kilometre downwind. We also found that it was impossible to erect even a small blind in a gale.

Eight days later it was time to head north to do comparative studies on the other two species of Patagonian oystercatchers. The Agriculture people in Rio Gallegos had advised us to contact Zsolt Kovacs at the Centro Nacional Patagonica in Puerto Madryn for assistance. Señor Kovacs quickly offered to drive us about, but his fee threatened to bankrupt us. After much haggling we eventually fixed a price for four

days of field work, the minimum time necessary for the studies we had planned.

A three-hour drive along a dusty corrugated road from Puerto Madryn brought us to the wildlife sanctuary at Punta Tombo, situated on a small peninsula jutting eastwards into the south Atlantic. Prolific food supplies in this part of the ocean make Punta Tombo an ideal breeding place for thousands of Magellanic penguins. We cleared our research plans with the ranger and were allowed onto the sanctuary. Penguins were everywhere—in burrows, under bushes and boulders, running busily to and from the shore, diving into the waves, and frolicking in the shallows. Incubating birds twisted their heads comically from side to side to watch us go by, and now and then shifted position to bray loudly at neighbours or mates.

Suddenly, as we rounded a headland, we came upon pied and black oystercatchers, the two species we wanted to study. Within minutes we had found a nest with three eggs and during the next three days we filmed and recorded many more adults with

Right: The tawny-throated dotterel, denizen of the southern Patagonian pampas.

Opposite page, top: Colony of dolphin gulls at Punta Tombo.





nests and eggs. We found nests only four metres apart, whereas two or three nests per kilometre is usual for most other species. This was oystercatcher Mecca! It was not difficult to obtain excellent tapes and films of these birds. Unlike the Fuegian species, the black oystercatchers at Punta Tombo are incredibly tame. While we were measuring their eggs both members of a pair would often approach within two or three metres. Their behaviour is also more typical of other species, and at no time did adults attempt to give distraction displays to lure us away from their eggs. Analysis of tape recordings showed that their calls given during aggressive encounters are similar to those of other species, except that they are often emitted rapidly in groups of two or three. This phenomenon is thought to be an adaptation for short-distance communication in species that nest in high densities.

We were an excited group as we spotted our first ever sheathbills, strange birds with pink facial wattles and renowned for their peculiar diet of seaweed. Next to them was a pair of steamer ducks, another

oddity in the bird world because they are flightless. Further seaward we encountered a large colony of breeding Dominican gulls, in the middle of which was a small group of dolphin gulls with their telltale bright red bills and legs. Dolphin gulls are such expert egg thieves that birds breeding nearby sat tightly on their nests. At the tip of the peninsula we marvelled at the large colony of neotropic and king cormorants, neatly seated on their mud nests like spectators at a football game. In the heat of the mid-day sun incubating birds opened their bills wide and fluttered their throats vigorously to cool themselves by evaporative water-loss. All the while we kept our sun hats pulled tightly over our heads, particularly as terns and skuas buzzed us angrily for trespassing on their territories.

Driving back to Puerto Madryn our truck startled a rhea crossing the road with a bevy of eleven young chicks, resplendent in their brown and white striped down. Rheas are often referred to as South American ostriches because they are large flightless birds resembling their African cousins. When we stopped to



Left: Distraction display of a Fuegian oystercatcher. This display is intended to lure predators away from the nest and eggs.



Right: A young armadillo curled up within its protective "armour plate".

Below: Nesting colony of neotropic cormorants at Punta Ninfas. Nestlings, crowded on the mud and guano nests with their parents, are distinguishable by their completely black plumage.



examine a small armadillo on the side of the road, we flushed some tinamous from nearby thornbushes. Tinamous are curious South American birds with only moderate powers of flight, and are thought to be related to flightless birds such as rheas and ostriches. To complete our wildlife show Señor Kovacs showed us some rust-coloured llamas, called guanacos, grazing in the arid brushland.

Our final day in Patagonia was spent at Punta Ninfas where fossil-bearing strata are exposed in the badly eroding coastal cliffs. As I examined huge fossil oysters protruding from the mudstone, I recalled Darwin's description of similar fossil beds in Patagonia and I felt awed by this timeless landscape. Here Darwin saw large numbers of bones of extinct

species of mammals; the bones showed that the extinct species, while different from modern species in South America, were clearly related to them. Thus Darwin began to think that gradual change through time was an alternative to the then prevailing view of the immutability of species.

After observing American oystercatchers on the beach, the huge cormorant colony at the base of the cliffs, and the sea lions hauled up on the shore, we bade farewell to the magnificent scenery and wildlife of Patagonia. We felt privileged to have been there, sad to leave, and eager to return.

A field trip that succeeds against such long odds cannot possibly end tamely. On our way to the airport near Buenos Aires our taxi driver apparently



misunderstood our attempt in broken Spanish to tell him our departure time, and we clung together in petrified silence as he careered in and out of heavy traffic at 80 mph in a 1965 Ford. At the airport another shock awaited us. Despite our efforts to leave behind all inessential items, the bill for our excess luggage was a whopping \$304. Not only could we not muster the cash between us, but the airline would not accept a credit card. We finally persuaded the manager that Aerolineas would have their cash on arrival in New York, and at the last moment we were allowed on board.

In January 1982 I will be travelling to South Africa to complete my studies of the ten species of oystercatchers. In many ways, I hope for a peaceful, uneventful trip, but, then again, maybe I don't.

*Below: Sealions hauled up on the beach at Punta Ninfas. The larger, darker bulls dwarf the surrounding females.*



Dr. Allan Baker is Curator in Charge of the Department of Ornithology. He was born in New Zealand and spent his undergraduate and graduate years at the University of Canterbury in Christchurch. In 1972 he joined the ROM, where he specializes in the study of oystercatchers. He is also conducting extensive studies on genetic variation in species of birds such as mynas, sparrows, and starlings, which were introduced widely around the world in the last century. He and Dr. Chris McGowan of the ROM's Department of Vertebrate Palaeontology are collaborating on a study of the evolutionary relationships of the flightless birds referred to as ratites.

Photos: Allan Baker, ROM; pp. 34, left, 36, J. G. Strauch, Jr.; p. 37, bottom, E. H. Miller; p. 34, right, Alyson Hannas, ROM



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